Serial No. 10/073,245

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 7, 13, 19, 25, 32, 39, 40, and 47 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-47 are pending and under consideration. Reconsideration is requested.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 2, claims 1, 4, 6, 7, 10, 12, 13, 16, 18, 19, 22, 24, 25, 28, 30-32, 35, 37-40, and 45-57 were rejected under 35 U.S.C. § 103 in view of U.S. Patent No. 6,078,923 to Burrows ("Burrows") and U.S. Patent No. 6,438,556 to Malik et al. ("Malik"). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Burrows generally provides that Web pages include various data (text, multimedia contents, etc.). See column 3, lines 39-44. Further, column 3, line 65, of Burrows merely describes that there is provided a means for indexing a parsed page. Burrows breaks down the portions of information of the pages 200 into fundamental indexable elements or atomic pairs. See column 4, lines 36-38. However, Burrows fails to teach or suggest, "dividing both data and index data into a plurality of sections," as recited in independent claim 1. Rather, in Burrows the pages are parsed and information therein is divided into indexable elements. The cited reference fails to provide that the information therein and index data are parsed into a plurality of sections.

Burrows fails to teach or suggest, "compressing each of the sections using a plurality of compression parameters to obtain a compressed file," as recited in independent claim 1, "where each of the sections comprises the data and the index data." Rather, the cited reference provides that each data structure 1001 includes two disk files, where one file is used to store a portion of a compressed data structure and the compressing may be performed using Huffman or Lempel-Ziv codings. See column 12, lines 14-18, and column 14, lines 13-15. Nothing in Burrows teaches or suggests that the data structure includes data and index data, which each data structure, including both the data and the index data, is then compressed using compression parameters.

11

The Office Action correctly recognized that Burrows fails to teach or suggest, "storing the compressed file in a storage medium together with address information and compression parameters of the sections after compression," as recited in independent claim 1. Accordingly, the Office Action refers to Malik as providing such claimed feature.

Malik generally describes a system and method to compress data on a computer system. See columns 3, 7, and 11. The method of Malik separates the data into a plurality of segments, provides code words, each corresponding to a segment of the plurality of segments, and provides a representation of the data; the representation includes the code words, which replace the segments. However, similarly to Burrows, Malik fails to teach or suggest that the compressed filed is obtained by "compressing each of the sections," where each includes data and index data," and where "the index data is different from and corresponds to the data and is used to search or retrieve the data," as recited in independent claim 1.

Burrows and Malik generally provide compressing the data, but do not teach or suggest also compressing the index data.

Further, in Malik a unique code word is generated for each unique segment (column 5, lines 11-12), and that the index is created fro each segment. See column 6, lines 13-15. Column 6, lines 10-13, of Malik generally provides that a second dictionary indicates a relationship between the index of the segment and the code word of the subsegment. Thus, even assuming, arguendo, that Burrows and Malik were combined, a combination thereof would not provide "dividing both data and index data into a plurality of sections," as recited in independent claim 1.

The combination of the cited references fails to teach or suggest all the claimed features recited in independent claim 1.

Because independent claims 7 and 13 include similar claim features as those recited in independent claim 1, although of different scope, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 7 and 13. It is respectfully requested that independent claims 1, 7, and 13 and related dependent claims be allowed.

Independent claim 19 recites, "a region storing a compressed file which is divided into a plurality of sections which are compressed using a plurality of compression parameters; and a region storing address information of the sections and the compression parameters thereof, wherein each of the sections comprises data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data." Independent claim 25

recites, "a reading step which accesses a storage medium which stores a plurality of compression parameters, address parameters, and a compressed file, an original file being divided into a plurality of sections . . . , wherein each of the sections comprises data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data." Further, independent claim 32 recites, "a reading process section to control an access to a storage medium which stores a plurality of compression parameters, address parameters, and a compressed file, an original file being divided into a plurality of sections . . . , wherein each of the sections comprises data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data." Because independent claims 19, 25, and 32 include similar claim features as those recited in independent claim 1, although of different scope, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 19, 25, and 32. It is respectfully requested that independent claims 19, 25, and 32 and related dependent claims be allowed.

In the Office Action, at page 13, claims 2, 8, 14, 20, 26, 33, and 41 were rejected under 35 U.S.C. § 103 in view of Burrows, Malik, and U.S. Patent No. 5,951,623 to Reynar et al. ("Reynar"). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Because claims 2, 8, 14, 20, 26, 33, and 41 depend from independent claims 1, 7, 13, 19, 25, 32, and 40, respectively, all the claimed features of the independent claims must be shown in the cited references individually or combined. The arguments provided above supporting the patentability of independent claims 1, 7, 13, 19, 25, 32, and 40 in view of Burrows and Malik are incorporated herein.

Referring to Reynar, the reference provides an adaptive compression technique that is an improvement to Lempel-Ziv compression techniques to reduce transmission time of data from point to point. Once most frequent "words" for each type of the data are discovered, a dictionary for each type of data can be created. See column 14, lines 13-18 of Reynar. This dictionary, in conjunction with an initially empty dictionary, to which new "words" will be added, will then be used to perform the Lempel-Ziv compression. However, similarly to Burrows and Malik, Reynar fails to teach or suggest, "dividing both data and index data into a plurality of sections, wherein the index data is different from and corresponds to the data and is used to search or retrieve the

Serial No. 10/073,245

data," as recited in independent claim 1. Further, the cited reference is silent as to teaching or suggesting that "each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data; and storing the compressed file in a storage medium together with address information and compression parameters of the sections after compression," as recited in independent claim 1. Thus, assuming *arguendo* that Burrows, Malik, and Reynar are combined, the combination thereof would fail to teach or suggest all the claimed features recited in independent claim 1.

Because independent claims 7, 13, 19, 25, 32, and 40 include similar claim features as those recited in independent claim 1, although of different scope, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 7, 13, 19, 25, 32, and 40. It is respectfully requested that independent claims 1, 7, 13, 19, 25, 32, and 40 and related dependent claims be allowed.

In the Office Action, at page 14, claims 3, 9, 15, 21, 27, 34, 39, 40, and 42 were rejected under 35 U.S.C. § 103 in view of Burrows, Malik, and U.S. Patent No. 6,438,556 to Benveniste ("Benveniste"). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Because claims 3, 9, 15, 21, 27, and 34 depend from independent claims 1, 7, 13, 19, 25, and 32, respectively, all the claimed features of the independent claims must be shown in the cited references individually or combined. The arguments provided above supporting the patentability of independent claims 1, 7, 13, 19, 25, and 32 in view of Burrows and Malik are incorporated herein.

Referring to independent claims 39 and 40, as previously set forth, Burrows and Malik is silent as to providing, "an original file being divided into a plurality of sections and compressed for each section using the plurality of compression parameters so as to obtain a plurality of section data forming the compressed file and the address information corresponding to a plurality of sections . . . wherein each of the sections comprises data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data," as recited in independent claims 39 and 40. Nothing in Burrows indicates that the index entry is different from and corresponds to the word entry. The index entry, the information, and the word entry are not divided into a plurality of sections, and accordingly, the index entry cannot be used to search or retrieve the information or the word entry.

Further, Malik provides code words, each corresponding to a segment. The method of

14

Malik also provides a representation of the data, where the code words in the representation replace the segments, allowing the data to be access randomly. See abstract of Malik. However, nothing is taught or suggested in Malik where "each of the sections comprises data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data," as recited in independent claims 39 and 40.

Referring to Benveniste, this reference provides a FIFO implementation and determining whether a directory index for a segment is currently stored in the FIFO or not. See column 5, lines 57-67 of Benveniste. Also, Benveniste provides indicating the status of a segment with respect to its membership in a virtual uncompressed cache. In a case that the uncom0pressed flag is set to uncompressed, the remaining flags are unused and available for other uses. See column 6, lines 1-10 of Benveniste. However, similarly to Burrows and Malik, Benveniste fails to teach or suggest, "dividing both data and index data into a plurality of sections, wherein the index data is different from and corresponds to the data and is used to search or retrieve the data," as recited in independent claim 1. Further, the cited reference is silent as to teaching or suggesting that "each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data," as recited in independent claim 1. Thus, assuming *arguendo* that Burrows, Malik, and Benveniste were combined, the combination thereof would fail to teach or suggest all the claimed features recited in independent claim 1.

Because independent claims 7, 13, 19, 25, 32, 39, and 40 include similar claim features as those recited in independent claim 1, although of different scope, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 7, 13, 19, 25, 32, 39, and 40. It is respectfully requested that independent claims 1, 7, 13, 19, 25, 32, 39, and 40 and related dependent claims be allowed.

In the Office Action, at page 16, claims 5, 11, 17, 23, 29, 36, 43, and 44 were rejected under 35 U.S.C. § 103 in view of Burrows, Malik, and U.S. Patent No. 6,438,556 to Ikegami ("Ikegami"). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Because claims 5, 11, 17, 23, 27 and 29, 36, 43 and 44 depend from independent claims 1, 7, 13, 19, 25, 32, and 40, respectively, all the claimed features of the independent claims must be shown in the cited references individually or combined. The arguments provided above supporting the patentability of independent claims 1, 7, 13, 19, 25, 32, and 40 in view of Burrows

and <u>Malik</u> are incorporated herein.

Referring to <u>Ikegami</u>, this reference provides a description of the conventional Huffman coding method. <u>See</u> column 1, lines 45-67 of <u>Ikegami</u>. Further, when input data including a symbol string is compressed, bit maps are used. <u>See</u> abstract, column 17, lines 55-67, and column 18, lines 5-15 of <u>Ikegami</u>. In each bit map, "1" is set to a bit that represents the position of a relevant symbol of the symbol string. In contrast, "0" is set to a bit that represents the position of another symbol of the symbol string. However, similarly to <u>Burrows</u> and <u>Malik</u>, <u>Ikegami</u> fails to teach or suggest, "dividing both data and index data into a plurality of sections, wherein the index data is different from and corresponds to the data and is used to search or retrieve the data," as recited in independent claim 1. Further, the cited reference is silent as to teaching or suggesting that "each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data," as recited in independent claim 1. Thus, assuming *arguendo* that <u>Burrows</u>, <u>Malik</u>, and <u>Ikegami</u> were combined, the combination thereof would fail to teach or suggest all the claimed features recited in independent claim 1.

Because independent claims 7, 13, 19, 25, 32, and 40 include similar claim features as those recited in independent claim 1, although of different scope, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 7, 13, 19, 25, 32, and 40. It is respectfully requested that independent claims 1, 7, 13, 19, 25, 32, and 40 and related dependent claims be allowed.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.
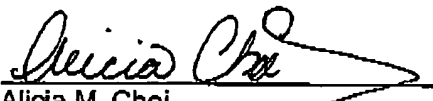
Serial No. 10/073,245

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 4/21/2004   By: _Alicia Choi_

Alicia M. Choi
Registration No. 46,62†

1201 New York Ave, N.W., Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

17